

Amendments to the Claims:

Claims 1, 3-8 and 10-21 have been amended. Claim 2 has been cancelled without prejudice. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for facilitating mass customization of an object, the method comprising:
generating a template representing data common to the object;
generating specific data to customize the object in conjunction with the template,
wherein the specific data comprises at least one tool path; and
directing at least one tool along the at least one tool path to fabricate ~~fabricating~~ a customized version of the object.

Claim 2. (Cancelled).

3. (Currently amended) The method of 1, wherein the ~~target~~ tool path is represented as a spline.

4. (Currently amended) The method of claim 1, wherein the object has an ideal model surface, ~~further comprising~~ wherein generating the specific data comprises creating an idealized tool~~[[-]]~~path from the ideal model surface.

5. (Currently amended) The method of claim ~~1~~ 4, further comprising generating a mathematically smooth 3D spline using the idealized tool_path.

6. (Currently amended) The method of claim ~~1~~ 5, further comprising generating surface normals from the ideal model surface at points distributed around the idealized tool_path.

7. (Currently amended) The method of claim ~~1~~ 6, further comprising displacing each surface normal from its end to ~~the~~ a nearest point on the smooth 3D spline.

8. (Currently amended) The method of claim 4 7, further comprising creating a spline connecting each unattached end of each surface normal.

9. (Original) The method of claim 8, wherein the ends are attached sequentially in a loop.

10. (Currently amended) The method of claim 1, wherein directing the tool comprises further comprising using a source spline to define motion of the tool head by defining tool orientation vectors, ~~and subsequent motion of a tool head.~~

11. (Currently amended) The method of claim 4 10, further comprising adjusting the source spline.

12. (Currently amended) The method of claim 11, wherein the source spline is adjusted by moderately elevationing or lowering ~~of the an~~ angle of ~~the a~~ surface normal.

13. (Currently amended) A method for fabricating ~~an a~~ a customized object, the method comprising:

receiving a digital representation of a target path;
generating a mathematically smoothed version of the target path;
applying the smoothed target path to generate a secondary target path; ~~and~~
generating a streamlined tool[[-]]path, based on the secondary target path; and
directing a tool along the tool path to fabricate the customized object.

14. (Currently amended) The method of claim 13, wherein the target path is represented as a spline.

15. (Currently amended) The method of claim 13, wherein the object has an ideal model surface, further comprising creating an idealized tool path from the ideal model surface.

16. (Currently amended) The method of claim 13 15, further comprising generating a mathematically smooth 3D spline using the idealized tool_path.

17. (Currently amended) The method of claim 13 16, ~~wherein the object has an ideal model surface~~, further comprising generating surface normals from the ideal model surface at points distributed around the idealized tool_path.

18. (Currently amended) The method of claim 13 17, further comprising displacing each surface normal from its end to ~~the~~ a nearest point on the smooth 3D spline.

19. (Currently amended) The method of claim 13 18, further comprising creating a spline that connects each unattached end of each surface normal and wherein the ends are attached sequentially in a loop.

20. (Currently amended) The method of claim 13, wherein directing the tool along the tool path comprises ~~further comprising~~ using a source spline to define motion of the tool head by defining tool orientation vectors, ~~and subsequent motion of a tool head~~.

21. (Currently amended) The method of claim 13 20, further comprising adjusting the source spline moderately elevationing or lowering ~~of the~~ an angle of ~~the~~ a surface normal.